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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,479	10/24/2003	Eric Kaerts	224792	1994

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EXAMINER

FEGGINS, KRISTAL J

ART UNIT PAPER NUMBER

2861

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,479

Applicant(s)

KAERTS ET AL.



Examiner

K. Feggins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 10 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 3 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/24/03, 11/20/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 1 & 5 fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations of the claim "... n thermal heads, where n is an integer" is broader than the claimed invention. An "integer" is any positive number, any negative number and zero. For the purpose of this rejection it will be assumed that n is an integer greater than zero. Please further clarify the specification and the claims.

Although applicant has claimed "... a thermal head printer for printing but not perforating"; "not perforating" has not been given weight because it is a part of the preamble and is not included in the body of the claim. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claims 9 and 10 should includes the phrase "the steps of " or "the process". Also, claims 9 & 10 are independent claims. They stand alone. Therefore it is not neccessay for the preamble to include "a second process" or "a third precess", respectively.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country; more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa et al. (JP 0 500 334 A2).

Hasegawa et al. disclose the following claimed limitations:

* regarding claims 1 & 5, a thermal head printer and a process for printing but not perforating a substantially light-insensitive thermographic material (pg 3, lines 7-18, pg 4, lines 33-49, figs 1 & 2);

* said thermal printer said thermographic material and comprising a transport system having a transport direction, n thermal heads, where n is an integer, (pg 3, lines 7-18, pg 4, lines 33-49, figs 1 & 2) (for the purpose of this rejection n is an integer of 1);

* each of said thermal heads comprising an array of substantially rectangular energizable heating elements, said heating elements having a length L_n in said transport direction and a pitch P_n between adjacent heating elements (pg 3, lines 7-18, pg 4, lines 33-58, figs 1 & 2);

* a means for supplying electrical energy to each of said substantially rectangular energizable heating elements in at least one of said thermal heads, said transport system being capable of transporting said light-insensitive thermographic material in contact or proximity with at least one of said thermal heads, wherein at least one of said

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thermal heads comprises heating elements for which L_n/P_n is between 0.25 and 0.88 (pg 3, lines 7-18, pg 4, lines 33-58, figs 1 & 2);

*further regarding claim 5, the steps of choosing a thermal head (there is only one thermal head to choose from; $n=1$), providing said substantially light-insensitive thermographic material, transporting said substantially light-insensitive thermographic material past said thermal head, and image-wise heating of said substantially light-insensitive thermographic material by supplying electrical energy to said heating elements (pg 3, lines 7-18, pg 4, lines 33-58, figs 1 & 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (JP 0 500 334 A2) in view of Katayama Hirohiko (JP 58089385 A).

Hasegawa et al. disclose all claimed limitations except for the following:

* wherein said thermal head printer comprises a replaceable thermal head or set of thermal heads.

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Hirohiko discloses the following:

* wherein said thermal head printer comprises a replaceable thermal head or set of thermal heads (Abstract) for the purpose of obtaining a constant printing density all the time when thermal heads are exchanged.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a replaceable thermal head, taught by, Hirohiko into Hasegawa et al. for the purpose of obtaining a constant printing density all the time when thermal heads are exchanged.

6. Claims 4 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (JP 0 500 334 A2) in view of Yagino et al. (4,841,120).

Hasegawa et al. disclose all claimed limitations except for the following:

* wherein said substantially rectangular heating element is a split resistor.

Yagino et al. disclose the following claimed limitations:

* wherein said substantially rectangular heating element is a split resistor (col 9, lines 46-62, figs 7 & 8) for the purpose of assuring high quality of printing.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a substantially rectangular heating element that is a split resistor, taught by Yagino et al. into Hasegawa et al. for the purpose of assuring high quality of printing.

Allowable Subject Matter

7. Claims 9 & 10 are allowed.

Claims 3 & 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for allowance of claim 9 is the inclusion of a method steps of a thermal head printer that includes heating elements without significant variation in image tone, wherein the length of said heating elements in the transport direction of said substantially light-insensitive thermographic material decreases with decreasing printing speed. It is this step found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 10 is the inclusion of a method steps of a thermal head printer that includes printing substantially light-insensitive thermographic material at different printing speeds with a different thermal head at each printing speed without significant variation in image tone; wherein each of said different thermal heads comprises heating elements with a different length in the transport direction of said substantially light-insensitive thermographic material and said length of said heating elements in the transport direction of said substantially light-insensitive thermographic material decreases with decreasing printing speed. It is these steps found in the claim, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

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Communication With The USPTO

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talbott Dave can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


K. FEGGINS
PRIMARY EXAMINER

3/05